## PATENT ABSTRACTS OF JAPAN

(11) Publication number:

63-162694

(43) Date of publication of application: 06.07.1988

(51) Int. CI.

C07D499/00 A61K 31/43

(21) Application number : 61-311480 (71) Applicant : SUNTORY LTD

**26. 12. 1986** (72) Inventor : (22) Date of filing: ISHIGURO MASAJI

IWATA HIROMITSU TANAKA SATOE

## (54) PENEM DERIVATIVE, ITS PRODUCTION AND USE THEREOF

## (57) Abstract:

NEW MATERIAL: The compound of formula I (R

is H or allyl; A is 5W6- membered

heteroaliphatic group having 1W2 0 atoms in

the ring) or its salt.

EXAMPLE: (5R, 6S)-6-[1(R)-hydroxyethyl]-2-

(2-tetrahydrofuranyl)methylpenem-3-

carboxylic acid potassium salt.

USE: An antibacterial agent against Grampositive bacteria, Gram-negative bacteria

and anaerobic bacteria.

PREPARATION: The objective compound can be produced by reacting an N- ketoester

derivative of formula III (R1 is OH-

protecting group; R2 is allyl or carboxyl-

protecting group) with triarylphosphines or

a trialkyl phosphite, converting the

reaction product to a compound of formula IV by heating and, if necessary, subjecting the resultant compound to the reaction to eliminate the protecting groups R1 and R2.

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's

decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]
[Date of final disposal for application]
[Patent number]
[Date of registration]
[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

Copyright (C); 1998, 2003 Japan Patent Office